Sample Work Plan that meets requirements for programs covered by 40 CFR Part 35 Sub-Parts A & B

Tidal Wetland Functional Assessment Project Work Plan

Summary of Project:

This project is proposed as the first phase in development of a Tidal Wetlands Assessment and Monitoring program. This project proposes to develop a functional assessment tool, using the Hydrogeomorphic (HGM) approach that can be used by a number of state and federal agencies and organizations to improve the effectiveness of wetland protection, wetland monitoring, wetland restoration, and compensatory mitigation along the west coast. The products will support regulatory needs as well as a variety of activities that support salmon and watershed restoration. This project will build upon the completed Statewide HGM Classification and Profiles and extend HGM guidebook development to a high priority region of the state.

I. Background of Project:

Over the past few years, the importance of tidal wetland restoration has been elevated due to the State Plan for Salmon and Watersheds and related research and funding for restoration projects. In addition, the State has established a "net gain of estuarine wetland" goal. There is now an urgent need for a reference based, rapid assessment method for evaluating restoration or mitigation site baseline conditions and restoration potential, and for monitoring the ecological results of both regulatory and non-regulatory restoration activities. e goal of this project is to develop a rapid assessment method that can be used by a wide range of wetland interests to assess wetland condition for use in making restoration decisions.

Recipient is requesting $200,000 from EPA. Recipient will be providing $100,000 as match to this project.

Proposed Budget for Three Year Project Period:

Total project cost:	$300,000
Federal funds:	$200,000
Non-federal match:	$100,000

II. Key Project Objectives:

1. Develop a field-verified wetland classification key suitable for use along the West Coast.

2. Develop an empirically verified rapid assessment method that can be used in the field to document the ecological condition of reference wetlands along a gradient of disturbance and restoration potential.
3. Develop a more intensive assessment method that can be used to characterize and quantify the ecological functions that are "typical" of the assessed classes of wetlands. Allow for the aggregation of ecological functions into a set of "beneficial uses" that can be attributed to wetlands.

III. Work Plan Components:

Component #1:
Collect HGM reference wetland site data that will be used to develop criteria for the design and the evaluation of wetland restoration projects, including wetland compensatory mitigation projects
*** Estimated Work Years: .1 FTE** ***Time line**: 07/01/03 – 03/30/05 **Amount:** $ 260,000

*** Staffing and Schedule Assumptions:**
1. The majority of the project tasks will be performed by a Project Contractor. One agency staff member will utilize 5% of their time during this time line to direct project management and conduct contract administration of project elements.
2. Two interns will be hired, one employed by the Project Contractor to do the GIS tasks from July-September, 2003 and another contracted by the Watershed Association for October-November, 2003 to assist with the site disturbance assessments and ownership determinations.

Task A. Identify Tidal Wetlands Potentially Accessible for Research
Due: September 30, 2003

Description: Develop maps and tables that show locations and list sites that likely could be accessed by HGM field crews during 2003. These are sites on or abutting public land, and sites to which landowners have given permission to us for access. Together, they serve as candidate reference sites for the HGM assessment.

- Obtain digital coverages for wetlands NWI and ownership;
- Determine if any NWI or other wetland maps have been digitized to head-of-tide, and if so obtain the digitized coverages;
- Identify ownership of all digitally mapped tidal wetlands as specifically as possible by overlaying ownership and wetland themes;
- Print ownership map for quads where wetlands not digitally mapped, at same size as NWI;
- Identify ownership for additional wetland areas and accessibility

Task B. Prepare Candidate Site Background Information
Due: December 31, 2003

Description: A catalog will be prepared for each candidate reference site, including ownership and access information, a completed disturbance assessment form, attribute data obtained from existing digital maps using GIS, available water quality and hydrogeomorphic data, aerial photographs, and ground-level photographs.

- Determine schedules & expected outputs themes, scales from other coastal GIS projects;
- Identify and manually map the locations of useful existing sampling sites;
- Obtain selected digital coverages for these sites & their watershed;
- Develop, write, & test a GIS script to automatically assign tidal wetlands to 1 of 3 possible subclasses;
- Interpret disturbances from the historical air photos, quantify where possible;
- Conduct visual survey of sites to assess human disturbances, using standard form;
- Enter all the site background data into a computer database.

Task C. Develop Draft List of Indicators, Procedures, Data Forms, and Reference Sites for Assessing Functions & Values
Due: March 31, 2004

Description: A preliminary list of tidal wetland functions, values, and potential indicators of those functions and values will be developed. A supporting report will provide a rationale for each indicator as documented from scientific literature, conceptual models, and professional opinion. For use during the 2003 field season, the report will also a outline a procedures or several options for procedures for measurement or estimation of each indicator, and b provide a list of accessible reference sites believed to best span the range of human disturbance and natural variability. These sites represent a narrowing of the list of candidate reference sites from Task A.

- Identify indicators of function from literature review & conceptual models
- Prepare draft protocols, QA plan, & models for function indicators

Task D. Collect and Analyze Field Data from Candidate Reference Wetlands using Indicators and Procedures developed by First Year effort
Due: March 30, 2005

Description: Trained assessment team members will collect field level data from the suite of reference sites selected to represent the range of wetland types and condition that exist within the project objectives.

- Select A-team leaders and A-team members and furnish necessary sampling equipment and supplies;
- Prepare final list of sites w/ site information;
- Deploy A-teams to sample all reference sites selected;
- Analyze collected field data from reference wetland sites;
- Calibrate or adjust draft models;
- Organize data results for presentation

Grant Products will include:

Reference site data for two or three Estuarine Fringe HGM subclasses from the Rogue River estuary to the Nickitak estuary.

Component # 2: Development of a rapid assessment guidebook for assessing function, condition, and value of two to three HGM subclasses of tidal wetlands in the State

*** Estimated Work Years**: .30 FTE **Time line:** 03/31/05 – 09/31/05 **Amount:** $40,000

***Staffing Assumptions**: The majority of this project task will be performed by a State Agency employee. Approximately 30% of that staff position will be directed to this project.

Task A. Develop Draft Operational Guidebook

Due: June 31, 2005
Description: Develop a Draft operational HGM Guidebook for the tidal fringe wetlands on the Oregon coast that follows prescribed HGM assessment protocols.

- Develop a user friendly assessment protocol based on field data collected and draft sampling protocols;
- Prepare supplemental reference materials;
- Conduct peer review of draft guidebook.

Task Deliverables:

1. A Tidal Fringe Assessment Guidebook for two to three subclasses that includes referenced based scoring models for assessment of functional capacity for approximately 12 functions, and a method for the qualitative assessment of associated wetland values.
2. Addendum to or recommendations for improving the wetland assessment component of the State Watershed Assessment Manual.

IV. Joint Evaluation of Performance

The grantee agrees to submit a bi-annual performance report. This report will describe progress on completion of work plan commitments, provide a discussion of the work performed for all work plan components, and include a discussion of any existing or potential problem areas which could affect project completion and what measures will be taken to address or correct the identified problem. If the EPA Project Officer, after reviewing the report, finds that the recipient has not made sufficient progress under the work plan, EPA and the recipient will negotiate a resolution that addresses the issues.

V. Quality Assurance

Environmental data will not be collected until year two of the project. A quality assurance plan will be developed during year one based in protocols and procedures developed by the Contractor and the Technical Advisory Committee and will be submitted to EPA prior to the awarding of funds for year 2.

VI. Roles and Responsibilities of EPA in Carrying out the Work Plan Commitments

EPA will have no substantial role in the accomplishment of the work plan commitments. EPA will monitor progress and provide technical assistance through participation on the Technical Advisory Committee (TAC) and as needed to ensure project completion.